



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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Ref: 8EPR-N

Mr. Lynn D. Kolund, District Ranger
Hell Canyon Ranger District
Black Hills National Forest
c/o Kelly Honors
330 Mt. Rushmore Road
Custer, SD 57730

RE: EPA Comments on Draft Environmental Impact
Statement, Vestal Project, CEQ #20110433

Dear Mr. Kolund:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4321, *et seq.*, and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the December 2011 Draft Environmental Impact Statement (DEIS) for the Vestal Project. This DEIS was prepared by the Hell Canyon Ranger District of the U.S. Department of Agriculture Forest Service (USFS) Black Hills National Forest to analyze potential environmental impacts associated with proposed vegetation treatments to reduce the threat to forest resources from the existing mountain pine beetle (MPB) epidemic and to protect local communities and watersheds from large-scale, high intensity wildfire.

The Vestal Project Area surrounds the City of Custer and is within Custer County, South Dakota. The project area consists of 43,516 acres, including 25,726 acres of USFS lands and 17,790 acres of interspersed private lands (including City and County properties). The analysis area includes extensive private dwellings, businesses, government offices, Bismarck Lake Recreation Area and Campground, and Crazy Horse Mountain. The City of Custer is a designated "at-risk" community for wildfire.

A summary of the two alternatives analyzed in the DEIS is as follows:

- Alternative 1 (No Action) - no vegetation or fuels management actions; and
- Alternative 2 (Proposed Action) – 25,449 acres of vegetation treatments, including commercial thinning of trees not currently infested with MPB and sanitation removal of trees currently infested with MPB; 1,761 acres of prescribed burning; up to 23,693 acres of deadfall treatment to reduce fuels (mechanical treatment of existing slash through methods such as lopping, chipping, and piling/burning); and 0.6 mile of new roads/34 miles of road reconstruction.

In a May 23, 2011 letter, EPA provided scoping comments for this project. We appreciate that the USFS addressed many of our comments in the DEIS. As a result, our concerns with the December 2011 DEIS have been narrowed to these issues: (1) aquatic resources and (2) air quality. These concerns are the basis for EPA's EC-1 rating discussed at the conclusion of this letter.

1) Aquatic resources in the project area are of critical importance, requiring evaluation and mitigation of associated impacts.

EPA considers protection of aquatic resources to be among the most critical issues to be addressed in any NEPA analysis for vegetation management activities. Most treatments contemplated under the proposed action (e.g., harvest, mechanical treatment, prescribed fire, road construction) have the potential to adversely impact aquatic resources, including surface and ground waters, wetlands, streams, riparian areas, and their supporting hydrology. Given EPA's concerns regarding aquatic resources, we recommend that USFS position itself (and others) to fully evaluate impacts resulting from the alternatives by providing complete data and robust analyses of potential impacts.

Existing Conditions: The DEIS notes that there are 67 acres of wetlands within the project area. For disclosure purposes, we recommend including a map of this acreage in Appendix A, similar to the map provided for streams of the project area. We appreciate the qualitative discussion of existing stream health and water quality provided in the DEIS. We recommend expanding the discussion to include any available water quality monitoring data and/or identification of significant gaps in monitoring data that could be targeted for collection through the project monitoring plan. Data of particular interest include nutrient concentrations, water temperature, dissolved oxygen and turbidity. In addition, the DEIS notes that the project area includes one stream, French Creek, that is identified as a Clean Water Act Section 303(d) impaired waterbody for low dissolved oxygen. French Creek is not supporting its designated beneficial uses of Coldwater Marginal Fish Life and Limited Contact Recreation. We recommend elaborating on how proposed project activities might affect this specific waterbody and water quality parameter and how project design criteria would mitigate impacts given that proposed treatments could occur in the French Creek water influence zone and possibly contribute to decreased oxygen levels due to organic loading or increased temperature.

Water Quality Impacts of Beetle Epidemic: The DEIS notes that although no formally identified Municipal Watersheds are located in the project area, the community of Custer obtains its water from within the project area. The presence and handling of beetle-killed trees has the potential to impact public water supplies if it leads to organic loading of area waterbodies that are sources of drinking water. Organic matter interacts with disinfectants used in the drinking water treatment process to form disinfection byproducts, which are a human health concern. Organic loading may also decrease oxygen levels that can lead to the release of metals such as arsenic, manganese, and iron from sediments. We recommend the FEIS provide a more detailed discussion regarding how the community of Custer obtains its water from within the project area, and then assess the potential for organic loading impacts to drinking water treatment and supplies.

Range-Related Impacts to Aquatic Resources: The DEIS notes that there are currently 13 grazing permits within the analysis area. Range improvements (e.g., water developments, spring enclosures, fencing,

corrals, etc.) are generally designed and constructed in a manner that protects aquatic resources from adverse impacts associated with livestock grazing. We support the DEIS design criteria to protect these range improvements from mechanical vegetation treatments and road construction/reconstruction. We recommend expanding the design criteria to identify measures to protect range improvements from prescribed fire application.

Impact of Roads on Aquatic Resources: To reduce adverse impacts to watersheds, EPA recommends minimizing new road construction and road density, as well as locating roads to limit impacts to surface waters. The proposed action would necessitate 0.6 mile of new system road, 34 miles of road reconstruction and 91 miles of road maintenance to facilitate treatment activities. The DEIS notes that temporary roads and the 0.6 mile of new system road would be closed or decommissioned following project completion. We recommend monitoring road reconstruction and new road activities. Since it is often difficult to effectively close roads in the Black Hills and negative environmental impacts associated with roads could continue if closure efforts are less than 100% successful, EPA recommends that a monitoring plan and schedule be developed to assess the effectiveness of road closures.

Design Criteria and Monitoring Plan: We support the extensive list of project design criteria to protect aquatic resources, including special requirements for streams and riparian habitats. To ensure that project activities do not adversely impact aquatic resources, we recommend expanding the list as follows:

- Require revegetation of all disturbed areas within the same growing season they are disturbed, and monitor revegetation efforts for five years to ensure success.
- Specify steps to protect range improvements from prescribed burning.
- Monitor breakdown of hydrophobic soils for five years following prescribed burns.

Appendix B, Design Criteria, notes that Watershed Conservation Practices (WCPs) and South Dakota Best Management Practices (BMPs) will be implemented to protect geologic, soil and water resources. Appendix C, Monitoring Plan, notes that BMPs will be monitored during and after management activities. We recommend that all applicable WCPs and BMPs be listed in Appendix B and the Appendix C discussion be expanded to address how the USFS intends to ensure that WCPs are properly implemented to ensure that no substantial or long-lasting effects to these resources result from project activities.

2) Air quality impacts associated with the project are a critical concern that must be fully evaluated.

It is particularly important to assess and mitigate air quality impacts associated with the Vestal Project given the project area surrounds the population center of Custer and is near two mandatory Class I Federal areas (Wind Cave National Park and Badlands National Park). We appreciate that the DEIS includes an Air Quality section which addresses many of our recommendations related to air quality, including a summary of available data for existing conditions, a qualitative discussion of potential project emissions, and a description of mitigation measures to address related prescribed fire emissions.

Existing Conditions: For disclosure purposes, we recommend expanding the qualitative smoke emissions discussion to include PM₁₀. In addition, we recommend broadening the existing conditions

discussion to include available summary data for 24-hour PM_{2.5} and PM₁₀ concentrations (in addition to the annual averages presented for PM_{2.5}). Finally, we recommend including the trending of air quality at the nearby Class I Federal areas over the past several years (see the VIEWS site for air quality related values -AQRVs- at <http://views.cira.colostate.edu/web/>). Information regarding current conditions will be an important tool for monitoring the impacts of project activities. Decision-makers will need to understand baseline conditions in an effort to ensure that Vestal Project activities, when combined with air quality impacts from external sources, do not adversely impact the NAAQS or AQRVs.

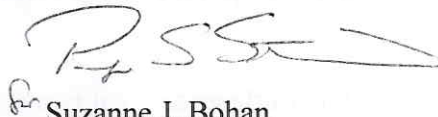
Prescribed Fire: The proposed action includes the application of prescribed burning to 1,761 acres. This significant prescribed fire activity may cause degradation of air quality in the region. We appreciate the clear explanation of potential prescribed fire impacts and the detailed steps to minimize such impacts. We fully support the prescribed fire design criteria and monitoring recommendations as outlined in Appendices B and C of the DEIS. Please note that it appears requirements for public notification procedures, as noted on page 106 in the Air Quality section of the DEIS, were not carried through to Appendix B. We recommend expanding Appendix B to include this requirement.

EPA's Rating and Recommendation

Consistent with Section 309 of the CAA, it is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action, EPA is rating this DEIS as Environmental Concerns – Insufficient Information (EC-1). The "EC" rating indicates that EPA review has identified environmental impacts that need to be avoided in order to fully protect the environment. The "1" rating indicates that EPA believes the DEIS provides adequate information and analyses to disclose project impacts. A full description of EPA's rating system is enclosed.

We hope that our comments regarding aquatic resources and air quality will assist you in further reducing the environmental impacts of this project. We appreciate the opportunity to review and comment on this DEIS. If we may provide further explanation of our comments, please contact me at 303-312-6925, or your staff may contact Amy Platt at 303-312-6449.

Sincerely,



Suzanne J. Bohan
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

Enclosure

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO -- Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC -- Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO -- Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU -- Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 -- Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 -- Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new, reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 -- Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

